San Francisco Bay Area Regional Priority Projects and Programs Attachment 6 – Monitoring, Assessments and Performance Measures

Contents **Page**

This attachment presents anticipated monitoring, assessment, and performance measures for each of the projects included within this proposal. In accordance with the PSP, this attachment includes the following information

- The metrics used to evaluate project performance
- The monitoring systems in place to verify project performance
- A description of the data collection process and how the data will be evaluated to ensure the goals and objectives of the IRWM Plan are being met
- A discussion of how the project is consistent with the Basin Plan
- A project performance measures table including
    - Project Goals
    - Desired Outcomes
    - Output Indicators
    - Outcome indicators
    - Measurement Tools and Methods
    - Targets

A performance measure and monitoring table for Grant Administration is also included in this Attachment to describe measures that will be implemented by the lead applicant, Bay Area Clean Water Agencies (BACWA), and coordination with partner agencies to ensure timely reporting, contracting and invoicing.

0. Grant Administration

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Form Committee to Oversee	Fair decision-making and representation for direction of grant admin activities.	Active participation in calls/meeting and responsiveness to information requests.	Detailed work plans, schedules, budgets; well documented invoices; and, timely resolution of any outstanding issues.	Call/meeting summaries; progress reports; invoices to DWR; payments from DWR; payments to local projects sponsors (LPS).	Timely submission of satisfactory reports; clear and adequately documented invoices; timely payments to LPS.
Description					
Establish a Committee with one rep per grant funded agency to manage grant admin.	An oversight and coordination committee will help assure that reporting, grant reimbursement, and outstanding issues are handled in a mutually agreeable manner.	Call/mtg notes will indicate participation and e-mail correspondence will indicate responsiveness to info requests.	These documents and timely resolution of outstanding issues will provide a firm and verifiable basis to implement the grant.	Summaries of conference calls or meetings will be distributed in draft and final form. Progress reports will be prepared in draft and final form to meet submittal dates per Grant Agreement. Invoices will be prepared as soon as the corresponding progress report has been accepted by DWR. LPS Payments are to be promptly disbursed after DWR payment is received by BACWA.	The specific due dates for reports will be determined by the reporting cycle and required contents specified in the Grant Agreement.

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Set up Legal Agreements for grant funding.	Legal arrangements to cover all of the conditions embodied by the Grant Agreement between DWR and BACWA.	Acceptable terms and conditions, including work plan, budget and schedule.	Governing body approval of agreements by all participating entities.	Executed agreements with local project sponsors. DWR execution of grant agreement.	Execution of all agreements by 12/31/11.
Description					
Execute grant agreements between BACWA and each grantee to define responsibilities.	Detailed legal agreements will spell out how all conditions and contingencies will be addressed so there is an agreed upon framework to proceed w/grant.	Detailed Agreement terms and Exhibits will articulate the agreed upon basis for grant work.	Governing body approval evidences agreement with the grant terms and conditions and commitment to proceed.	Each LPS will have a unique agreement that will be used to determine relative responsibilities to implement the grant.	The 12/31 date is based on a June 1 award date and the time to reach mutually agreeable grant agreements and governing body approval and execution of the agreements.

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Maintain records and financial records.	Well organized grant records, confirmation of progress, and certified accounting.	Regular updates and reports on grant admin activities, including financial info.	Certified financial statements and problem free financial transactions.	Monthly financial records, field reports and photos, invoice records, correspondence.	100% payout of all grant funds due (less applicable retention); no exceptions on financial reports; continuous availability of reporting info on website.
Description					
Effectively manage and maintain grant records.	Web based records covering reporting, invoicing and related information accessible to all participants.	A regular information flow will provide DWR and participants with latest info on grant.	Satisfactory financial records and transactions help all parties to know that they are receiving the benefits intended by the Grant.	These are the day to day records in addition to reporting and invoicing in constituting the expected documentation that will be maintained for grant admin.	These targets will be expected by all participants in carrying out the grant.

1. Regional Recycled Water Program

The Regional Recycled Water Program includes the following elements:

- CCCSD/Concord Recycled Water Project (Central Contra Costa Sanitary District)
- DSRSD Central Dublin Recycled Water Distribution and Retrofit Project (Dublin San Ramon Services District)
- EBMUD East Bayshore Phase 1A I-80 Pipeline (East Bay Municipal Utility District)
- MMWD Peacock Gap Recycled Water Extension (Marin Municipal Water District)
- NBWRA Program (North Bay Water Reuse Authority) which in turn is comprised of the following four components:
    - Novato SD/NMWD Novato North Service Area Stage 1 Project
    - LGVSD/NMWD Novato South Service Area Stage 1 Project
    - Napa SD Napa State Hospital (NSH) Pipeline Construction Stage 1 Project
    - SVCSD Recycled Water Project Stage 1 Project (Sonoma Valley County Sanitation District)
- SFPUC Harding Park Recycled Water Project (San Francisco Public Utilities Commission)
- SBWR Industrial Expansion and Reliability (South Bay Water Recycling)

The Regional Recycled Water Program aims to provide 3,210 AFY of potable water offsets (including Delta, local surface and groundwater supplies).

Metrics Used to Evaluate Project Performance

Metrics used to evaluate project performance include:

- AFY of potable water offsets

Monitoring System

Monitoring systems in place include flow meters to record the amount of recycled water delivered.

Data Collection and Evaluation Process

The annual amount of recycled water deliveries to each of the customers will be tracked and recorded as potable offsets.

Consistency with Basin Plan

The Regional Recycled Water Project will increase the use of recycled water in the Bay Area Region, reducing wastewater discharges, and corresponding, pollutant loading reductions. It is anticipated to decrease the loading of bacteria, bioaccumulative substances, biostimulatory substances, salinity, suspended material, and ammonia into receiving waters. It may also contribute to increased dissolved oxygen and decreased turbidity.

For each element, anticipated monitoring, assessment, and performance measures have been identified. These measures are summarized in the following table.

Project Performance Measures Table: 1. Regional Recycled Water Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
A. CCCSD/Concord Recycled Water Project - Phase I					
Increase utilization of recycled water for non-potable water demands	Increased recycled water use	Increase in recycled water supply connections	Increase in recycled water use	Number of recycled water connections in project area	Connection of 34 new customers within first year of operation
Reduce importation of potable water from the Central Valley Project	Decrease in potable water demand for irrigation	Reduced potable water demand	Recycled water deliveries for irrigation	Measure recycled water use through recycled water meter readings	Delivery of an additional 190 AFY of recycled water for landscape irrigation within first year of operation
Reduce wastewater discharge to the Suisun Bay	Improve water quality within Suisun Bay	Reduction in amount of nutrient loading discharged to Suisun Bay (measured at CCCSD's treatment plant)	Reduction in discharge to Suisun Bay	Treated effluent discharge meter readings	Reduction in effluent discharge by up to 190 AFY within the first year of operation
B. Central Dublin Recycled Water Distribution and Retrofit Project					
Expand utilization of available recycled water to customers that are currently using potable water supply for irrigation	Reduce/postpone development of new or expanded water supplies	Recycled water deliveries	Increase in recycled water use	Measure recycled water use through recycled water meter readings	Connection of 11 new customer sites and delivery of up to 240 AFY for landscape irrigation within the first year of operation
Reduce importation of potable water from the Sacramento-San	Offset the water supply provided by the Zone 7 Water Agency from the	Reduced potable water demand	Reduction in potable water demand	Potable water meter readings	Reduction of up to 240AFY of potable water use for landscape irrigation

Project Performance Measures Table: 1. Regional Recycled Water Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Joaquin Bay Delta (Delta) and State Water Project (SWP)	SWP				within the first year of operation
Reduce discharge of wastewater into the San Francisco Bay	Improve water quality in the San Francisco Bay	Reduction in volume of effluent discharged to the San Francisco Bay (measured at DSRSD's treatment plant)	Reduction in discharge to the San Francisco Bay	Treated effluent discharge meter readings	Reduction in effluent discharge by up to 240 AFY within the first year of operation
Reduce energy consumption and DSRSD's carbon footprint	Reduced energy use for pumping effluent for discharge	Reduction in pumping costs	Reduction in energy required for pumping and decrease of carbon emissions	Effluent pumping costs	Reduction in energy consumption at the effluent discharge pump station of up to 147,275 kWh after one complete year of operation
C. EBMUD East Bayshore Phase IA I-80 Pipeline					
Reduce regional dependence on imported water supplies	1. Substitute recycled water for beneficial landscape, commercial and industrial uses 2. Reduce EBMUD diversions from the Mokelumne and/or Sacramento Rivers	Recycled water deliveries	Increase in recycled water use	Measure recycled water use through recycled water meter readings	Reduction of up to 210 AFY of potable water use for primarily landscape irrigation purposes when entire I-80 pipeline and remainder of distribution pipelines are complete with customer retrofits

Project Performance Measures Table: 1. Regional Recycled Water Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Increase regional supply reliability	Reduce the risk of severe rationing during prolonged droughts	Sufficient water supply during peak summer demands	Amount of reduction in potable water use in project area	Recycled water delivery flow data	Projected water supply deficiencies reduced by 210 AF annually when entire I-80 pipeline and remainder of distribution pipelines are complete with customer retrofits
Reduce wastewater discharges to San Francisco Bay	Improve water quality in the San Francisco Bay	Reduction in volume of effluent discharged to the San Francisco Bay (measured at EBMUD's treatment plant)	Reduction in discharge to the San Francisco Bay	Treated effluent discharge meter readings	Reduction in effluent discharge by up to 210 AFY when entire I-80 pipeline and remainder of distribution pipelines are complete with customer retrofits
D. MMWD Peacock Gap Recycled Water Extension					
Provide recycled water to new area by expanding MMWD's recycled water distribution system	Provide all water demands for landscape irrigation at the Peacock Gap Golf Course and surrounding residential neighborhood	Supply of recycled water conveyed via the proposed extension project	Number of recycled water connections to the irrigation systems in the project area	Recycled water delivery flow data, summarized on an annual basis: total annual delivery (AFY)	Total annual recycled water delivery to the project area of 320 AF
Reduce use of imported potable water for irrigation purposes	Irrigation of the Peacock Gap Golf Course and surrounding residential neighborhood with	Reduction or elimination of use of potable water for landscape irrigation	Quantity of recycled water supplied.	Bi-monthly records of recycled water usage at the irrigation meters located in project area	Reduction of approximately 320 AFY of potable water consumption for irrigation purposes

Project Performance Measures Table: 1. Regional Recycled Water Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
	recycled water instead of potable water from the Russian River and Mt. Tamalpais/ Lagunitas Creek Watersheds				
Improve water supply system reliability	More potable water available for other uses	Sufficient water supply during peak summer demands	Amount of reduction in potable water use in project area	Recycled water delivery flow data	Projected water supply deficiencies reduced by 320 AF annually
Improve the water quality and marine environment of San Francisco Bay	Reduction in amount of pollutants from the Las Gallinas Valley Sanitary District's effluent to the Bay	Increase beneficial reuse	Reduction in projected water supply deficiencies	LGVSD discharge data	10% decrease of LGVSD discharge to the Bay
E. North Bay Water Reuse Authority Program					
Leverage cooperative funding opportunities through regional partnering	Implement regional and/or multi-agency projects	Projects implemented with regional partnerships	Projects implemented across large geography and/or with multiple partners	Geographic scale and/or number of partner agencies involved in projects and programs	More than one agency or jurisdiction involved in projects
(i) Novato SD/NMWD – Novato North Service Area Project					
Reduce demand on imported surface water	Reduce demand on imported Russian River supplies	Recycled water deliveries	Increase in recycled water use	Measure recycled water use through recycled water meter readings	Supply 186 AFY of recycled water to users

Project Performance Measures Table: 1. Regional Recycled Water Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
(ii) LGVSD/NMWD – Novato South Service Area Project					
Reduce demand on imported surface water	Reduce demand on local potable water supplies	Recycled Water Use	Supply recycled water	Measure customers' usage of recycled water	Supply 204 AFY of recycled water to users
(iii) Napa SD Napa State Hospital Pipeline Construction, Stage 1					
Construct NSH Pipeline and convey recycled water to parts of Napa College and to the Napa State Hospital	1. Replace 200 AF of potable water used for irrigation purposes with recycled water 2. Provide infrastructure necessary to convey recycled water to MST area, offsetting as much as 1,000 AF of water once MST pipeline is constructed	1. Construction completion 2. Connection to pipeline 3. Convey 215 AF of recycled water annually.	1. Amount of recycled water (AFY) conveyed in new pipeline annually	Measure recycled water use through recycled water meter readings.	1. 215 AFY of recycled water available for NSH and Napa College use annually 2. Total of 1,000 AF annually of recycled water available to be delivered to MST pipeline, once constructed
(iv) SCVSD Recycled Water Stage 1 Project					
Reduce demand on imported surface water	Reduce demand on local potable water supplies	Recycled Water Use	Supply recycled water	Measure customers' usage of recycled water	Supply 100 AFY of recycled water to users
Reduce groundwater pumping/overdraft	Reduce demand on local potable water supplies	Recycled Water Use	Supply recycled water	Measure customers' usage of recycled water	Supply 100 AFY of recycled water to users

F. SFPUC Harding Park Recycled Water Project					
Offset an annual average of 260 AFY of potable water demand	Tertiary treated recycled water is used to irrigate Harding Park and potable water offset is realized	Recycled water use and demonstrated savings on customer's water bills.	Increase in recycled water use	Measure recycled water use through recorded water meter data	Average annual demand reduction of 260 AFY
G. South Bay Water Recycling - Industrial Expansion and Reliability					
Provide new water to the region offsetting our demand on imported sources	Recycled water will be relied upon by the local economy as a viable green business alternative to the use of imported potable supplies	Recycled water will be sold to retailers that will monitor recycled water sold to customers through customer meters	More customers recognize the value of recycled water as a reliable resource and connect to the system	1. Water Meters 2. Customer Database	1. 500 AFY 2. Zero (0) Interruptions in supply 3. Increase in Demand for Recycled Water

2. Regional Water Conservation Program

The Regional Water Conservation Program includes the following elements aimed at reducing potable water demand and promoting high-efficiency technologies and best management practices to improve indoor and outdoor water use efficiency throughout San Francisco. The Program includes five elements:

- High-Efficiency Toilet and Urinal (HET/HEU) Direct Install/Rebate Program
- Regional High-Efficiency Washer (HEW) Program
- Water-Efficient Landscape Education Program
- Water-Efficient Landscape Rebate Program
- Weather-based Irrigation Controllers Program

Metrics Used to Evaluate Project Performance

The following table describes the various metrics that will be used to evaluate the performance of each of these program elements.

Program Element	Metrics
HET/HEU Direct Install/Rebate Program	• Number HETs and HEUs installed and/or rebated per year • AFY of water saved
HEW Program	• Number of HEWs rebated per year • AFY of water saved
Water-Efficient Landscape Education Program	• Number of landscape professional trainings and workshops conducted per year • Number of Bay-Friendly Qualified Landscape Professionals certified by the Program • Total number of people in attendance at workshops and demonstrations. • Total number of website hits
Water-Efficient Landscape Rebate Program	• Number of rebates issued for removing irrigated lawn and replacing it with water-efficient landscapes • AFY of water saved
Weather-based Irrigation Controllers Program	• Number of rebates issued/controllers installed per year • AFY of water saved

Monitoring Systems

The following table describes the monitoring systems in place to verify performance of each of these program elements.

Program Element	Monitoring Systems
HET/HEU Direct Install/Rebate Program	• All participants will be required to meet Water Agency eligibility requirements. • To receive a rebate, customers must produce copy of paid receipt showing that an approved HET/HEU has been purchased. Post

	inspections may be conducted for verification
HEW Program	• All participants will be required to meet Water Agency eligibility requirements. • To receive a rebate, customers must produce copy of paid receipt showing that an approved HEW has been purchased • Post inspections may be conducted for verification
Water-Efficient Landscape Education Program	• Training and workshop attendees are surveyed to identify the square feet of lawn converted. Website contacts are surveyed for square feet of lawn converted • Nurseries will be contacted four times per year to determine the trends of Bay Friendly plant sales following trainings
Water-Efficient Landscape Rebate Program	• All participants will be required to meet Water Agency eligibility requirements. • To receive a rebate, customers must complete an application indicating the square foot of irrigated lawn converted to water-efficient landscape • Pre and/or post inspections may be conducted for verification
Weather-based Irrigation Controllers Program	• All participants will be required to meet Water Agency eligibility requirements. • To receive a rebate, customers must produce copy of paid receipt showing that an approved WBIC has been purchased • Post inspections may be conducted for verification

Data Collection and Evaluation Process

The following table describes the data collection and evaluation process for each of these program elements

Program Element	Data Collection and Evaluation Process
HET/HEU Direct Install/Rebate Program	• The participating agencies will log the number of HETs and HEUs rebated/installed and rebate dollars provided; • The participating agencies will review rebate applications to ensure that applicants meet qualifying criteria. • The number of toilets replaced will be tracked on a monthly/annual basis. If the trend shows that the participating agencies will not meet its target of replacing 35,000 toilets during the project period then the District will increase its public education program with expanded notification of the availability of the rebate program.
HEW Program	• The participating agencies will log the number of rebates and rebate dollars provided; • The participating agencies will review rebate applications to ensure that applicants meet qualifying criteria. • The number of HEW's purchased will be tracked on a

	monthly/annual basis. If the trend shows that the participating agencies will not meet its target of replacing 51,000 regular washers during the project period then the participating agencies will increase its public education program with expanded notification of the availability of the rebate program.
Water-Efficient Landscape Education Program	• The participating agencies will conduct surveys at all workshops and trainings, via the website, and at host nurseries. • The participating agencies will evaluate website utilization via weekly reports, subscriptions, and activity reports from consultants.
Water-Efficient Landscape Rebate Program	• The participating agencies will log the number of rebates, rebate dollars provided, and the landscape square footage converted to water-efficient landscaping. • The participating agencies will review rebate applications to ensure that applicants meet qualifying criteria. • The square footage and associated rebate amount will be tracked on a monthly/annual basis. If the trend shows that the participating agencies are not on track to meet the target then the participating agencies will increase program marketing.
Weather-based Irrigation Controllers Program	• Participating agencies will log the number of rebates and rebate dollars provided. • The participating agencies will review rebate applications to ensure that applicants meet qualifying criteria. • The number of WBICs rebated will be tracked on a monthly/annual basis. If the trend shows that the participating agencies are not on track to meet the target then the participating agencies will increase program marketing.

Consistency with Basin Plan

The Regional Water Conservation Program will reduce water demands for agencies that derive their supplies from the Delta., Decreased water demand would benefit the area's wastewater sector through lower discharge volumes .Therefore, this project would be expected to contribute to a reduction in concentrations of the bulk of the contaminants listed, which is consistent with the Basin Plan.

Since much of the IRWMP agencies' service areas border the CALFED Bay-Delta, any water savings will result in direct benefits to the Delta. Every acre-foot of water savings from the Regional Water Conservation will be available in the Delta for other uses.

For each element, anticipated monitoring, assessment, and performance measures have been identified. These measures are summarized in the following table.

Project Performance Measures Table: Regional Water Conservation Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
High-Efficiency Toilet and Urinal Direct Install/Rebate Program					
To improve water use efficiency and provide drought relief benefits to the entire region and reduce strains on Bay-Area water supplies and the Delta	To save approximately 700 AF of water annually	1. Number of high volume toilets/ urinals replaced with HETs/ HEUs	1. Calculated water savings using current savings studies and program activity levels	Quarterly reports will be submitted listing the number of HETs and HEUs installed, the associated costs of the program, and the calculated water savings	Replacement of up to 35,000 high-water use toilets and urinals with HETs and HEUs for an estimated savings of 700 acre-feet of water annually
To benefit the area's wastewater sector through lower discharge volumes	To reduce wastewater discharges	Number of high volume toilets/ urinals replaced with HETs and HEWs	Water reductions from HET and HEU programs correspondingly reduce wastewater flows	Quarterly reports will be submitted listing the number of HETs and HEUs installed, the associated costs of the program, and the calculated water savings.	Reductions in treated wastewater
Regional High-Efficiency Washer Program					
Promote water and energy Conservation	To save approximately 1,200 AF of water annually	Number of High Efficiency Clothes Washers installed as a result of the Program	Calculated water savings using current savings studies and program activity levels	Quarterly reports will be submitted listing the number of HEWs installed the associated costs of the program, and the calculated water savings	Installation of 51,000 HEWs, with an estimated savings of 1,200 acre-feet of water annually

Water-Efficient Landscape Education Program					
Promote water conservation	1. 320 – 480 Landscape professionals receive Bay-Friendly Training 2. 1,440 home gardeners attending lawn conversion trainings at nurseries 3. 52,120 home gardeners receive lawn conversion information	1. Number of landscape professionals qualifying as Bay Friendly-Landscape Professionals 2. Number of home gardeners attendance at lawn conversion trainings at nurseries 3. Number of people reached via the website	1. Lawn conversion rates – landscape professionals 2. Sheet mulch implementation rates - landscape professionals 3. Lawn conversion rates – trained home gardener 4. Lawn conversion rates – website information 5. Bay-Friendly plant sales at host nurseries	1. Surveys 2. Data collection from nurseries	47 AF of water conserved per year over a ten-year period for a total of 470 AF of water savings
Improve landscape irrigation efficiencies	Appropriate planting and irrigation practices	1. Reduction in overwatering 2. Reduction in outdoor water use	1. Reduced water bills 2. Sheet mulch implementation rates - landscape professionals 3. Bay-Friendly plant sales at host nurseries	1. Water meter data 2. Data collection from nurseries	47 AF of water conserved per year over a ten-year period for a total of 470 AF of water savings
Increase urban water use efficiency through conservation measures	Reduction in water use	Declining water use	Reduced water bills	Water meter data	47 AF of water conserved per year over a ten-year period for a total of 470 AF of water savings

Water-Efficient Landscape Rebate Program					
Reduce landscape water use by replacing water-intensive lawn with water-efficient landscaping	To save approximately 300 acre-feet of water annually	Increase the number of water-efficient landscapes in residential and commercial properties and correspondingly reduce the area of irrigated lawn.	Square feet of irrigated lawn replaced with water efficient landscaping	Quarterly Report listing the number of sites and square footage converted	Replace 3.8 million square feet of irrigated lawn with water efficient landscaping with. A reduction of 2,800 AF of water savings over a 10-year period.
Weather-based Irrigation Controllers Program					
Reduce Water Use and urban run-off	Reduced water demands and peaking demands	Increase in the number of WBIC's installed in single and multi-family residences and commercial sector Reduced water use and increase water efficiency	Number of WBICs installed	Quantify the number of WBIC's installed Track water meter data and document number of WBICS installed per sector.	Install 32,740 WBICs regionally Reduction of 2,660 AF of water over a 10-year period

3. Bay Area Wetland Ecosystem Restoration Program

The Bay Area Wetland Ecosystem Restoration Program (WERP) consists of a suite of restoration construction projects located on the bay shoreline of 3 counties. Each of the projects will carry out ecosystem restoration of degraded tidal wetlands and also address climate change response, flood management, protection and improvement of surface water quality, and will provide public recreation opportunities. Individually and collectively, the WERP projects will implement regional goals and objectives of the Bay Area IRWM Plan, the San Francisco Bay Comprehensive Conservation and Management Strategy, the Basin Plan, the Baylands Ecosystem Habitat Goals, the Tidal Wetland Recovery Plan of the U.S. Fish and Wildlife Service (USFWS), the San Francisco Bay Joint Venture Implementation Strategy and BCDC's Sea Level Rise Strategy for the San Francisco Bay Region.

The Bay Area Wetlands Ecosystem Restoration Program includes the following elements:

- Sears Point Wetland and Watershed Restoration
  - Restore 960 acres of tidal marsh and enhance 106 acres of seasonal wetlands
- Bair Island Restoration
  - Restore 896 acres of vegetated tidal marsh
- Pond A16/17 Habitat Restoration
  - Restore 90 acres of vegetated tidal marsh and create 280 acres of shallow water pond habitat

Metrics Used to Evaluate Project Performance

Metrics used to evaluate project performance include:

- Tidal wetland metric – Marsh plain vegetation appears within 5-10 years and continues development over following decades.
- Managed pond metric – Use of ponds for forging, roosting and nesting first winter and breeding season after construction (applicable to Pond A16/17)
- Water quality metric – Ponds and wetlands discharge show consistent improvement over 3 to 5 years.

Monitoring System

Monitoring systems will include the following:

- Aerial photography and GIS to track and analyze changes to vegetation presence and types as well as geomorphology.
- Bathymetric surveys to track sediment changes within and adjacent to project areas.
- Bird, fish and benthic monitoring and studies to assess populations.
- Water quality samples of data sondes to assess DO, salinity, temperature, nutrients and pollutants.
- Annual inspection of visitor facilities and interviews with resource managers
- Monitoring of flood protective structures during high water events.

Data Collection and Evaluation Process

Data for the project will be collected based on the metrics listed above, and will follow project level protocols for monitoring. The evaluation process consists of evaluating the following outcome indicators in the following table:

Outcome Indicator	Description
Tidal marsh: sedimentation, vegetation, species abundance.	Sedimentation should increase, salt marsh vegetation should colonize new marsh plain, increased abundance of tidal salt marsh species.
Pond indicators: shorebird and other bird species.	Increased use of ponds by shorebird and dabbling duck populations for forging, roosting, and nesting.
Improved water quality.	Increased DO levels in and discharged from ponds.
Connectivity indicators: size and distances between patches.	Geographic connectivity increased through increased habitat patch size and decreased distance between patches.
Installation of visitor improvements (trails, signs, overlooks).	Visitation to newly-accessible areas occurs without significant impacts to wildlife.

Consistency with Basin Plan

The Wetlands Ecosystem Restoration Program will implement restoration of tidal wetlands located along the shoreline of the San Francisco Bay. The restoration of tidal wetlands will help filter pollutants from point and non-point sources and increase tidal flushing and circulation, thus improving overall Bay water quality which is consistent with the water quality objectives in the Basin Plan.

Anticipated monitoring, assessment, and performance measures have been identified for the Program. These measures are summarized in the following table.

Project Performance Measures Table: Bay Area Wetland Ecosystem Restoration Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Restore a variety of habitats for local and migratory San Francisco Bay species.	Restore tidal marsh, seasonal wetlands and create shallow water pond habitat	Aerial photography, field surveys and GIS analysis to evaluate the amount, character and quality of habitats being created.	1. Tidal marsh: sedimentation, vegetation, species abundance. 2. Pond indicators: shorebird and other bird species.	1. Aerial photography and 2. GIS analysis 3. Population counts	1. Tidal wetland metrics: marsh plain vegetation appears within 5-10 years and continues development over following decades. 2. Managed pond metric: use of ponds for forging, roosting, and nesting first winter and breeding season after construction.
Restore salt marsh habitat for endangered tidal marsh species.	Restore tidal marsh, seasonal wetlands and create shallow water pond habitat	Aerial photography, field surveys and GIS analysis to evaluate the amount, character and quality of habitats being created.	1. Tidal marsh: sedimentation, vegetation, species abundance. 2. Pond indicators: shorebird and other bird species.	Bathymetric surveys	1. Tidal wetland metrics: marsh plain vegetation appears within 5-10 years and continues development over following decades. 2. Managed pond metric: use of ponds for forging, roosting, and nesting first winter and breeding season after construction.

Project Performance Measures Table: Bay Area Wetland Ecosystem Restoration Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Restore large areas of tidal habitats and provide connections between patches of tidal marsh.	Restore tidal marsh, seasonal wetlands and create shallow water pond habitat	1. Aerial photography, field surveys and GIS analysis to evaluate the amount, character and quality of habitats being created. 2. Regular and comprehensive wildlife monitoring	1. Tidal marsh: sedimentation, vegetation, species abundance. 2. Connectivity indicators: size and distances between patches.	Aerial photography and GIS analysis	1. Tidal wetland metrics: marsh plain vegetation appears within 5-10 years and continues development over following decades. 2. Managed pond metric: use of ponds for forging, roosting, and nesting first winter and breeding season after construction.
Improve the ability to manage water depths and salinity levels in the managed ponds.	Restore tidal marsh, seasonal wetlands and create shallow water pond habitat	1. Aerial photography, field surveys and GIS analysis to evaluate the amount, character and quality of habitats being created. 2. Regular and comprehensive wildlife monitoring	Pond indicators: shorebird and other bird species.	Bathymetric surveys	1. Water quality metrics in ponds and wetland discharge show consistent improvement over 3-5 years. 2. Lack of flooding/overtopping of flood protective structures under design conditions.
Improve estuarine water quality for species and	Restore tidal marsh, seasonal wetlands and create	1. Bathymetric surveys 2. Regular and comprehensive water	Improved water quality.	Water quality samples or data sondes	Water quality metrics in ponds and wetland discharge show

Project Performance Measures Table: Bay Area Wetland Ecosystem Restoration Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
downstream benefit.	shallow water pond habitat	quality sampling			consistent improvement over 3-5 years.
Improve recreational features that would support wildlife compatible uses, such as environmental education, scientific study, nature observations and photography.	Restore tidal marsh, seasonal wetlands and create shallow water pond habitat	Regular visitor facility monitoring	Installation of visitor improvements (trails, signs, overlooks).	Visitor facility inspections	Visitation numbers increase from pre-project levels without significant impacts to wildlife.

4. Regional Green Infrastructure Capacity Building Program

The Bay Area Regional Green Infrastructure Capacity Building Program will implement three demonstration projects in the northern, southern and eastern sub-regions of the San Francisco Bay Area IRWM region and analyze the performance of these projects. Results of the pilot evaluations will then be used to inform and expand development of green infrastructure projects to all parts of the region.

This project will implement an improved approach to manage stormwater by treating stormwater at the source, using small-scale integrated site design, treatment devices, and management practices to mimic the site's natural hydrology. In addition to effective stormwater management, green infrastructure can also provide many environmental, social, and economic benefits including reduction of runoff, water conservation, groundwater recharge, energy conservation and improvement of air quality.

This program includes the following elements:

- San Pablo Spine & Regional Promotion of Green Infrastructure
- Hacienda Avenue "Green Street" Improvement Project
- Napa Valley Rainwater Harvesting

Metrics Used to Evaluate Project Performance

Metrics used to evaluate project performance include:

- Stormwater pollutant reduction (targets based upon results from Daly City green infrastructure project)
    - Reduce mercury by 40% per acre
    - Reduce PCBs by 40% per acre
    - Reduce PAHs by 50% to 80%
    - Reduce copper by 50% to 80%
    - Reduce Zinc, Cadmium, Lead, Nickel by 50% to 80%

- Stormwater flow/volume reduction
    - Capture 80% to 90% of polluted stormwater in treatment units on San Pablo Avenue and Hacienda Avenue Green Streets Projects
    - Reduce storm event flows during storm events by 10,000 gallons per rain event for the Napa Rainwater Harvesting Project

- Water conservation savings from rainwater harvesting reuse

Monitoring System

Monitoring systems will include the following:

- Contaminant monitoring
- Hydrologic monitoring
- Water quality monitoring and sampling
- Non-potable reuse through tracking of the number of rain barrels installed
- Reduction in potable water demand for non-potable uses through water meter monitoring
- Flood control – operators/owners of rainwater harvesting systems will log volume and time of capture and release.

Data Collection and Evaluation Process

Data for the project will be collected based on the metrics listed above, and will follow project level protocols for monitoring. The evaluation process consists of evaluating the following outcome indicators:

Outcome Indicator	Description
Quantified benefits of demonstration projects	Consistent, expert use of standard and custom monitoring methods Document percentage reductions in heavy metals, hydrocarbons, and possibly pesticides, nutrients, and sediment loads for projects as appropriate given project scale, budgetary considerations, and target pollutants. Comprehensive data and data analyses
Understand regional opportunities for green infrastructure.	Report to the IRWMP governance group (Coordinating Committee) on project results.
Outreach	Number of presentations to jurisdictions/web hits

Consistency with Basin Plan

The ***Regional Green Infrastructure Capacity Building Program*** will slow and reduce peak stormwater flows, reduce urban runoff into creeks and waterways, and filter and improve stormwater quality. Therefore, it is anticipated that the program will decrease pollutant loading into receiving waters, which may include floating material, oil and grease, sediment, toxic materials and is consistent with the water quality objectives of the Basin Plan.

Anticipated monitoring, assessment, and performance measures have been identified for the Program. These measures are summarized in the following table.

Project Performance Measures Table: Bay Area Regional Green Infrastructure Capacity Building Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Increase adoption of LID/Green Infrastructure projects in the region	Reduced barriers to adoption of green infrastructure BMPs	Completed projects/Final project report	Completed project	Track total number of completed LID/green infrastructure projects around region through input from cities, counties, and the Regional Board, including those complete for this program	Complete the San Pablo Spine, Hacienda Ave and Napa Valley rain barrels and rain gardens
Analyze each project to determine actual benefits of water supply benefits	Documented and quantified water supply benefits of green infrastructure	1. Report of monitoring results 2. SFEP website with project outcomes	1. Amount of rainwater captured. 2. Reduction in potable water demand for irrigation/indoor non-potable uses	1. Track the number of rain barrels installed 2. Monitor potable water meter readings	Achieve 0.25 AF of reduced potable consumption (or provide no. of rain barrels installed)
Analyze each project to determine actual benefits of water quality benefits	Documented and quantified water quality benefits of green infrastructure	1. Report of monitoring results 2. SFEP website with project outcomes	Demonstrated % Reduction of heavy metals, hydrocarbons, and possibly pesticides, nutrients, and sediment loads	Conduct hydrologic and contaminant monitoring	1. Treat 39 acre feet/year (SWS: 7 acres treatment per city * 2 feet of rain / year = 14 acre/ft per year. Napa: 1 acre * 2 feet of rain/ year = 2 acre/feet/year. Campbell = 11.5 acres * 2 acre/ft/year = 23 acre/ft/year.) 2. Capture 80-90% of polluted Stormwater in treatment units on San Pablo Avenue & Hacienda Avenue

Project Performance Measures Table: Bay Area Regional Green Infrastructure Capacity Building Program

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Increase pervious cover	More natural hydrology and increased infiltration which will reduce pollutant levels in runoff	Completed projects/Final project report	Number of acres of impervious hardscape converted to planted areas	Calculate planted area during from final design plans and perform verification measurements after project construction	Convert 1.8 acres of impervious hardscape to planted area
Disseminate the lessons learned from implementing these projects for applicability by other cities, counties and water management entities to benefit their future water management practices	Increased public awareness	1. Signage explaining projects to the public 2. SFEP website with project outcomes 3. Presentations to jurisdictions 4. Report to the IRWMP governance group on project results	1. Completed demonstration projects	List of jurisdictions who've heard about program, list of signage locations	All cities and counties in Bay Area have heard a presentation about the benefits of green infrastructure
Determine the cost/benefit of small cisterns for rainwater harvesting benefits	Understanding of the quantitative benefits of projects based on monitoring results	Completed projects/Final project report	Completed project costs and quantified benefits	Cost: Bid estimates, actual construction cost, quantification of indirect costs. Benefit: Public surveys, quantification of water supply benefit, indirect benefits.	Benefit-Cost ratio greater than 1 to 1

5. Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program is a multi-objective program that serves both the greater Bay Area and specific disadvantaged communities (DACs) or underserved watershed communities through advancing their capacity to reduce flood damages from underperforming stormwater systems and overbank flows from natural drainages. In addition, targeted assessments of flood infrastructure, fisheries habitats for key salmonids, and other stream restoration sciences will be addressed as part of the multi-objective approach to manage hazard risks within the context of climate change. This program supports a broad-based Bay Area network of environmental justice, watershed, flood protection, educational and scientific organizations.

This program includes the following elements:

- Watershed Partnership Technical Assistance
- Stream Restoration with Schools and Community in Disadvantaged Communities of the North Bay
- Floodplain Mapping for the Bay Area with Disadvantaged Communities Focus
- Storm Water Improvements and Flood Reduction Strategies Pilot Project in Bay Point
- Disadvantaged Communities Richmond Shoreline and City of San Pablo Flood Project
- Pescadero Creek Watershed Disadvantaged Communities Integrated Flood Reduction and Habitat Enhancement Project
- Pescadero Creek Steelhead Smolt Outmigrant Trapping
- Stream Channel Shapes and Floodplain Restoration Guidance and Watershed Restoration in San Francisquito Creek, East Palo Alto, a Disadvantaged Community
- Steelhead and Coho: Bay Area Indicator for Restoration Success SF Estuary Steelhead Monitoring Program

Metrics Used to Evaluate Project Performance

Metrics used to evaluate project performance include:

- Number of successful revegetation projects completed
- Percent increase in knowledge of watershed processes as determined by teacher/student surveys
- Completed maps of flood infrastructure in DACs
- DAC criteria specific to San Francisco Bay Region
- Completed designs for parkway and restoration projects in DAC areas
- Number of completed creek design curves for specific designated watersheds
- Number of students trained in regional design curve development
- Lineal feet of streams restored or enhanced
- Acres of stormwater infrastructure analyzed for required improvements
- Number of smolts recorded in selected watersheds

Monitoring System

Monitoring systems will include the following:

- Vegetation planting survival success at restoration sites

- Steelhead Smolt monitoring to determine population status
- Steelhead physical condition monitoring
- Photomonitoring of restoration projects
- Teacher and student surveys on watershed awareness

Data Collection and Evaluation Process

Data for the project will be collected based on the metrics listed above, and will follow established project level protocols for monitoring.

Consistency with Basin Plan

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Project will lead to reduced flooding in highly contaminated areas adjacent to San Francisco Bay, thus reducing pollutant inputs of toxic materials, which may include floating materials, oil and grease, heavy metals, bacteria and other settleable and suspended materials associated with stormwater runoff and flooding of contaminated land areas. The portions of the project related to development of regional curves for stream restoration projects will contribute to the Regional Board's Stream and River Protection Circular guidance document and Stream and Wetland Systems Protection Policy (in progress and expected to be adopted as a Basin Plan Amendment in 2011-12); restoration activities will contribute to sediment reduction (including the two TMDL watersheds of San Francisquito Creek and Pescadero Creek); smolt trapping will provide key information for development of sediment TMDL implementation measures. All of these project outcomes will directly contribute to improving water quality in the Bay and streams and will be consistent with the Regional Board's Basin Plan.

Project Performance Measures Table: Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
A. Watershed Partnership Technical Assistance					
Assist Bay Area Watershed Network to participate in IRWMP and other regionwide efforts	Increased participation from stakeholders in IRWMP process; better integration among Bay Area watershed interests	Working Group products	Development of policy statements, assessment and monitoring criteria	Number of participants in IRWMP meetings and Bay Area Watershed meetings; number of policy statements developed and assessment criteria developed	Measurable increase in IRWMP process and meeting participation
Develop resources for stakeholders on watershed issues	Better educated public, community, schools and other groups on IRWMP and watershed protection	▪ Program website ▪ Training Video ▪ On-the-ground workshops ▪ SFEP News inserts on IRWMP projects ▪ Workshop materials	More complete resource library for watershed issues; better educated public; more participation in IRWMP	Online surveys Workshop participant surveys Number of videos purchased	Success criteria targets to be developed based on working group feedback
B. Stream Restoration with Schools and Community in Disadvantaged Communities of the North Bay					
Restore local wetland and riparian habitats	Restored riparian and wetland habitat	STRAW will conduct 10 days of riparian and/or wetland restoration	Maintain a 75% success rate of revegetated area	1. Lineal feet of stream channel restored	7,500 lineal feet of stream channel restored
Increase environmental knowledge and skills in students and teachers	1. Teachers will have the knowledge to provide meaningful environmental science education 2. Students will learn to analyze,	Seven to twelve teachers receive professional development in environmental science to link curriculum in their classrooms throughout the school year	1. Teachers will participate in professional activities and restoration activities with their students. 2. K-8th grade students will	1. Teacher Surveys 2. Student Class Work	K-8th grade students and teachers will raise their awareness of watershed health, including water quality, birds, aquatic insects, wetland macro invertebrates, native plants, and

Project Performance Measures Table: Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
	understand, and solve environmental problems.		participate in hands-on riparian and wetland restoration		stream flow by a minimum of 25%.
C. Floodplain Mapping for the Bay Area with Disadvantaged Communities Focus					
Compile and standardize existing flood infrastructure data into GIS	Regional and comprehensive picture of waterways and flood infrastructure for planning and assessment	Flood infrastructure map (regionally standardized digital map of existing flood infrastructure based on disparate datasets from various flood agencies around the region)	Agencies will have a centralized tool to plan flood management on a regional and state level and be able to develop priorities for Statewide Flood Needs Assessment	GIS mapping, digitized datasets	Completion of map to design specifications and use by flood district managers at local and state level
Integrate flood infrastructure mapping with the Bay Area Aquatic Resource Inventory	Identify potential areas of inter-agency collaboration in flood protection and facility management	Flood infrastructure map (elements of this map will be integrated into State and federal flood infrastructure inventories).	Outcome similar to above goal	Computer mapping tools	Local flood infrastructure maps successfully integrated into State and federal inventories
Provide flood infrastructure information to flood managers and planners	Planning tool for flood managers and planners to garner information about local infrastructure, stream network and DACs.	Online interactive web map that provides access to the flood infrastructure and DAC data.	Outcome as above	Feedback via Bay Area Floodplain Protection Agencies Association (BAFPAA)	Use of flood infrastructure online map by at least 50% of BAFPAA members

Project Performance Measures Table: Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Develop regionally specific definitions and criteria for identifying DACs	Definitions and criteria specific to SF Bay Area that accurately identifies DACs	Online interactive web map that provides access to the flood infrastructure and DAC data.	More equitable and widespread distribution of funding and resources to Bay Area DACs	Census block and residential income survey data	Publication of credible inventory of Bay Area DACs that supplements existing census block information
Identify DACs that are also areas of high flood risk	Prevent damage from flood due to aging infrastructure in the DACs	Online interactive web map that provides access to the flood infrastructure and DAC data.	Completion of map and use by agencies and communities	Allocation of resources for flood damage reduction to areas of greatest need in DACs	Development of list of priority areas for flood damage reduction in DACS
D. Storm Water Improvements and Flood Reduction Strategies Pilot Project in Bay Point					
Raise community awareness within DAC of stormwater and flood issues	1. Better understanding of local stormwater and flood control issues at the DAC and County-levels. 2. Improve communication between DACs and the Counties.	Number of student and community members engaged in data collection	Community is involved in process of data collection and storm water improvement activities	Record student and community participation in data collection.	At least 90 hours of data collection participation from students/other interested community members.
1. Develop high resolution mapping of the stormwater and flood control facilities within the DAC	Improved identification of areas within DACs which are vulnerable to flooding and	GIS layers containing high resolution data on flood risk, predicted depth for defined risk levels, and location and character of	Mapping completed that shows vulnerable areas and flood control facilities	Area of GIS coverage calculated	Up to two square miles of detailed stormwater and flood mapping.

Project Performance Measures Table: Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
2. Review mapping and local hydrology/hydraulics to assess flood risk hazards	stormwater pollution.	infrastructure deficiencies			
Identify and characterized infrastructure deficiencies within the DAC	Selection of identified deficiencies in County improvement plans	County improvement plans	Implementation strategies defined for future funding	Local datasets, GIS mapping	Use of data in county plans and future implementation strategies
Develop a template through pilot project for future reference to assist other DACs	Template developed that can act as model	1. Pilot project 2. Project reports	Template used successfully in this project and exported to other DAC areas	Template developed with community input	Template used in at least two other DACs
E. Disadvantaged Communities Richmond Shoreline and City of San Pablo Flood Project					
Advance high priority restoration opportunities in DACs along the North Richmond Shoreline	Rating curves and restoration design dimensions for North Richmond coastal creeks.	Completed field studies and restoration curves for North Richmond coastal creeks.	Advance high priority restoration and flood risk abatement actions for North Richmond coastal creeks	Next phase of projects funded or ready for funding	Contract documents or funding agreements for next phase of work completed.
Reduce water quality and flood hazards at the Richmond Parkway and Wildcat Creek at 23rd Street sites	Community-approved schematic designs for the Richmond Parkway overpass and Wildcat Creek	Completed schematic design for Richmond overpass and Wildcat Creek at 23rd Street.	Design accepted by community and local agencies for implementation	Approval of design and commitment to next step of implementation.	Design that will enable approximately 1,000 feet of creek channel to be restored

Project Performance Measures Table: Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
	restoration at 23rd Street.				
Increase local community involvement in restoration projects	Trained and involved local community	College/institutional students trained in hydrologic field techniques	Hydrologic data collected by students	Track number of students trained	Train at least six students in hydrologic techniques.
F. Pescadero Creek Watershed Disadvantaged Communities Integrated Flood Reduction and Habitat Enhancement Project					
Advance high priority restoration opportunities in DACs in Pescadero Creek Watershed	Rating curves and restoration design dimensions for Pescadero Creek Watershed	Completed field studies and restoration curves for Butano Creek in the Pescadero Watershed.	Advance high priority restoration and flood risk abatement actions for Butano Creek	Site selection. Restoration design curve methodology: cross-sections, bankfull measurements, pebble counts, LWD surveys.	Contract documents or funding agreements for next phase of work completed.
Reduce water quality and flood hazards in the town of Pescadero	Community preferred alternative for addressing solutions to reducing sediment-laden flooding in the town	Selected community preferred alternative, project designs	Project design alternative endorsed by community, local agencies, and resource agencies	Hydraulic monitoring, stakeholder meetings	Design that will enable approximately 2,000 feet of creek channel to be restored
G. Pescadero Creek Steelhead Smolt Outmigrant Trapping					
Measure watershed condition	Reliable and understandable watershed health measures	Smolt trapping monitoring data for three watersheds	1. Watershed management actions by agencies 2. Public use of results	Standardized smolt trapping	Monitoring data collected and reported

Project Performance Measures Table: Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
Establish and expand regional program	Ongoing regional monitoring network	Plans for staff, locations, budgets, etc. for remaining Bay Area anchor watersheds	Increased monitoring coverage	Completed monitoring programs (watersheds added to the program by establishing staff, budget, protocols, etc.)	Proposals produced to fund expanded monitoring program
H. Stream Channel Shapes and Floodplain Restoration Guidance and Watershed Restoration in San Francisquito Creek, East Palo Alto, a Disadvantaged Community					
Advance high priority restoration opportunities in DACs in San Francisquito Creek Watershed	Rating curves and restoration design dimensions San Francisquito Creek	Completed field studies and restoration curves.	Advance IRWMP immediate priorities for application of regional curves	Track projects	Application of regional curves to priority creeks, which represent about 16,000 linear feet of riparian restoration.
I. Steelhead and Coho: Bay Area Indicator for Restoration Success SF Estuary Steelhead Monitoring Program					
Measure watershed condition	Reliable and understandable watershed health measures	Smolt trapping monitoring data for three watersheds	1. Watershed management actions by agencies 2. Public use of results	Standardized smolt trapping	Monitoring data collected and reported
Establish and expand regional program	Ongoing regional monitoring network	Plans for staff, locations, budgets, etc. for remaining Bay Area anchor watersheds	Increased monitoring coverage	Completed monitoring programs (watersheds added to the program by establishing staff, budget, protocols, etc.)	Proposals produced to fund expanded monitoring program